GENETICAL RESEARCH

EDITORIAL BOARD
CHARLOTTE AUERBACH ARTHUR CHOVNICK W. HAYES
BRUCE HOLLOWAY D. ISH-HOROWICZ MARY F. LYON
ANNE McLAREN M. van MONTAGU R. NÖTHIGER J. PAUL
W. J. PEACOCK PETER A. PETERSON R. H. PRITCHARD
R. RILEY A. ROBERTSON N. S. WILLETTS

EXECUTIVE EDITOR
E. C. R. REEVE

ASSISTANT EXECUTIVE EDITORS
DAVID J. FINNEGAN
TRUDY F. C. MACKAY

Volume 41. 1983

CAMBRIDGE UNIVERSITY PRESS
CAMBRIDGE
LONDON NEW YORK NEW ROCHELLE
MELBOURNE SYDNEY

PUBLISHED BY
THE PRESS SYNDICATE OF THE UNIVERSITY OF CAMBRIDGE

The Pitt Building, Trumpington Street, Cambridge CB2 1RP
32 East 57th Street, New York, N.Y. 10022

© Cambridge University Press, 1983

Printed in Great Britain at the University Press, Cambridge

CONTENTS

No. 1 (February 1983)

OHTA, TOMOKO. Theoretical study on the accumulation of selfish DNA *page* 1

FALK, RAPHAEL. The effect of an unusual chromosome architecture on disjunction and non-disjunction in Drosophila 17

BENNETT, DOROTHEA, ALTON, ALTHEA K. and ARTZT, KAREN. Genetic analysis of transmission ratio distortion by *t*-haplotypes in the mouse 29

OHTA, TOMOKO. Time until fixation of a mutant belonging to a multigene family 47

KOORNNEEF, M., VAN EDEN, J., HANHART, C. J. and DE JONGH, A. M. M. Genetic fine-structure of the *GA-1* locus in the higher plant *Arabidopsis thaliana* (L.) Heynh 57

MCMAHON, A. and MONK, M. *X*-chromosome activity in female mouse embryos heterozygous for *Pgk-1* and Searle's translocation, T(X; 16) 16H 69

BROOK, J. D. *X*-chromosome segregation, maternal age and aneuploidy in the *XO* mouse 85

TOWNER, K. J. Transposon-directed mutagenesis and Chromosome Mobilization in *Acinetobacter calcoaceticus* EBF65/65 97

ERRATUM 103

BOOK REVIEWS 105

No. 2 (April 1983)

HARBERD, N. P. and EDWARDS, K. J. R. Further studies on the alcohol dehydrogenases in barley: evidence for a third alcohol dehydrogenase locus and data on the effect of an *alcohol dehydrogenase – 1 null* mutation in homozygous and in heterozygous condition 109

ADOLPH, SABINE and KLEIN, JAN. Genetic variation of wild mouse populations in southern Germany. I. Cytogenetic study 117

FIGUEROA, FELIPE, ZALESKA-RUTCZYNSKA, ZOFIA, ADOLPH, SABINE, NADEAU, JOSEPH H. and KLEIN, JAN. Genetic variation of wild mouse populations in southern Germany. II. Serological study 135

TOUSSAINT, ARIANE and SCHOONEJANS, ERIC. Production and modification of Mu(G–) phage particles in *E. coli K12* and *Erwinia* 145

MACDONALD, MARY V. and WHITEHOUSE, HAROLD L. K. A *buff* spore colour mutant in *Sordaria brevicollis* showing high-frequency conversion. Loss of the high-frequency conversion 155

FULTON, A. M. and BOND, D. J. An investigation into the origins of meiotic aneuploidy using ascus analysis 165

HART, GARY E. and TULEEN, NEAL A. Chromosomal locations of eleven *Elytrigia elongata* (= *Agropyron elongatum*) isozyme structural genes 181

SHORT PAPERS

POMBEIRO, SANDRA R. C., MARTINEZ-ROSSI, NILCE, M. and ROSSI, ANTONIO. Nitrite toxicity in *Aspergillus nidulans*: a new locus in a *proA1 pabaA6 yA2* strain 203

KOEBNER, R. M. D. and SHEPHERD, K. W. Shikimate dehydrogenase – a biochemical marker for group 5 chromosomes in Triticinae 209

BOOK REVIEWS 215

BOOKS RECEIVED 219

No. 3 (June 1983)

CHOJECKI, A. J. S., GALE, M. D., HOLT, LINDA M. and PAYNE, P. I. The intrachromosomal mapping of a glucose phosphate isomerase structural gene, using allelic variation among stocks of Chinese Spring wheat 221

BARANOV, V. S. Chromosomal control of early embryonic development in mice. II. Experiments on embryos with structural aberrations of autosomes 7, 9, 14 and 17 227

WALLIS, GRAHAM P., TABACHNICK, WALTER J. and POWELL, JEFFREY R. Macrogeographic genetic variation in a human commensal: *Aedes aegypti*, the yellow fever mosquito 241

ZOUROS, E., SINGH, SHIVA M., FOLTZ, DAVID W. and MALLET, ANDRE L. Post-settlement viability in the American oyster (*Crassostrea virginica*): an overdominant phenotype 259

FORSTHOEFEL, A. M. & MISHRA, N. C. Biochemical genetics of Neurospora nuclease. I. Isolation and characterization of nuclease (*nuc*) mutants 271

MISHRA, N. C. & FORSTHOEFEL, A. M. Biochemical genetics of Neurospora nuclease. II. Mutagen sensitivity and other characteristics of the nuclease mutants 287

SHORT PAPER

LAM, S. T. S., POLANI, P. E. and FENSOM, A. H. Steroid sulphatase in the mouse 299

ABSTRACTS 303

BOOK REVIEWS 321

BOOKS RECEIVED 325

INDEX 327